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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Heikki Kokkinen

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7249

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07/28/2005

WARE FRESSOLA VAN DER SLUYS &
ADOLPHSON, LLP
BRADFORD GREEN BUILDING 5
755 MAIN STREET, P O BOX 224
MONROE, CT 06468

EXAMINER

HOYE, MICHAEL W

ART UNIT

PAPER NUMBER

2614

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/497,238	Applicant(s) KOKKINEN, HEIKKI	
	Examiner Michael W. Hoyer	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10 and 17-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10 is/are allowed.
- 6) ☒ Claim(s) 17-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 08/979,489.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see the Remarks section of the Amendment filed on May 2, 2005, with respect to the rejection of claims 17-19 under 35 U.S.C. 103(a) as being unpatentable over Kou (USPN 5,303,234) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Citta et al (USPN 5,956,325).

Claim Objections

2. Claims 20-22 are objected to because of the following informalities: the item numbers (i.e. 120 and 121) in parentheses are not necessary and may be canceled from the claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 17-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Citta et al (USPN 5,956,325), previously cited by the Examiner.

As to claim 17, note the Citta et al reference, which discloses the claimed, “method for transmitting digital data in an additional channel of a communications system applying time division multiple access (TDMA)”, as met by a CATV system 10 with a common communications channel, including downstream communication from the headend 12 to the subscriber stations 14₁–14_n and upstream communication from the subscriber stations to the headend, according to a TDMA format (see Fig. 1, col. 1, lines 11-15, 17-24, and 35-52, and col. 4, lines 35-46). The claimed, “in which slots of a defined slot length are assigned for terminal equipment in order to distribute the use of data transmission capacity to the equipment, and the slots in the communications system are controlled by use indications transmitted downstream, which slots are further divided into mini slots, the use of which is controlled by the indications transmitted downstream”, is met by col. 2, line 62 – col. 3, line 33 and col. 4, line 47 – col. 5, line 19. The claimed, “wherein mini slots are used for the transmission of reservation messages which the terminal equipment use for informing a central configuration that the terminal equipment wish to reserve data transmission capacity”, is met by one or more subscriber stations using mini slots to request a number of reserved slots which is transmitted upstream to the headend in order to request a reservation of slots or data transmission capacity/bandwidth (see col. 2, lines 6-18, col. 4, line 47 – col. 5, line 62 and col. 6, lines 30-35).

As to claims 18 and 19, the claimed central configuration system and terminal equipment system are rejected based on the rejection of claim 17 above.

As to claim 20, the claimed “said mini slots each include a unique word and a payload containing a reservation message”, is met by the mini slots each including the source address of the corresponding subscriber station or “unique word”, and the number of reserved slots

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requested by the corresponding subscriber station or “payload containing a reservation message” (see col. 6, lines 30-35).

As to claims 21 and 22, the claims are rejected based on similar grounds as the rejection of claim 20 above.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Citta et al (USPN 5,956,325), in view of Williams (USPN 5,745,836), both previously cited by the Examiner.

As to claim 23, the Citta et al reference discloses that the claimed said mini slots are of a contention type (see col. 2, lines 18-32 for example). The claimed said mini slots are of a contentionless type is not explicitly disclosed by the Citta et al reference. However, the Williams reference teaches that it is possible and common to implement a system that simultaneously used a combination of contention based systems and/or non-contention based systems (see col. 6, lines 47-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Citta et al with Williams for the advantage of providing the additional benefits associated with a non-contention or contentionless system, in addition to, terminals would be able to transmit upstream to the

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headend using a constant data transmission capacity. One of ordinary skill in the art would have been led to make such a modification since Williams teaches that it is possible and common to implement such a system.

As to claims 24-28, the claims are rejected based on similar grounds as the rejection of claim 23 above.

Allowable Subject Matter

7. Claim 10 is allowed.

The following is a statement of reasons for the indication of allowable subject matter:

As for independent claim 10, the prior art, alone or in combination, does not teach or fairly suggest slots of a defined slot length that are assigned to distribute the use of data transmission capacity further divided into mini slots, wherein the length of three mini slots plus a guard byte is the same as the defined slot length. As for the most pertinent prior art of record, the Ghaibeh (USPN 5,956,338) reference discloses an 11 byte polling mini slot as shown in Fig. 13 and a plurality of upstream mini request slots 222 within a 68 byte polling slot 58, but does not teach or suggest that the length of three mini slots plus a guard byte is the same as the defined slot length. In the applicant's invention the feature as described above is specifically disclosed in claim 10.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoyer whose telephone number is **571-272-7346**.

The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at **571-272-7353**.

Any response to this action should be mailed to:

Please address mail to be delivered by the United States Postal Service (USPS) as follows:

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Effective January 14, 2005, except correspondence for Maintenance Fee payments, Deposit Account Replenishments (see 1.25(c)(4)), and Licensing and Review (see 37 CFR 5.1(c) and 5.2(c)), please address correspondence to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolator, etc.) as follows:

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Or faxed to: 571-273-8300

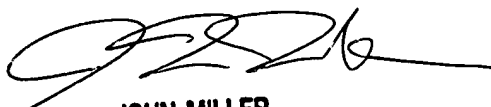
Hand-delivered responses should be brought to the Customer Service Window at the address listed above.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is **571-272-2600**.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

Michael W. Hoyer
July 22, 2005



JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600